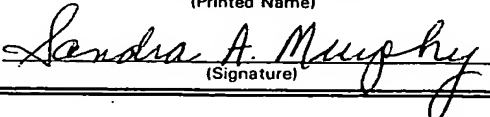


**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Ercan Adem  
Title: METHOD OF ULTRA-LOW  
ENERGY ION IMPLANTATION TO  
FORM ALLOY LAYERS IN  
COPPER  
Appl. No.: Unknown  
Filing Date: Unknown  
Examiner: Unknown  
Art Unit: Unknown

<b>CERTIFICATE OF EXPRESS MAILING</b>	
I hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office To Addressee" service under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: Commissioner for Patents, Washington, D.C. 20231.	
EV 004217966 US	04/16/2002
(Express Mail Label Number)	(Date of Deposit)
Sandra A. Murphy	
(Printed Name)	
	
(Signature)	

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Box NON-FEE AMENDMENT  
Washington, D.C. 20231

Sir:

Prior to examination of the above-referenced application, please amend the application as follows:

**In the Specification:**

Please amend the specification as follows:

On page 11, delete paragraph number 0043, and replace this paragraph with the following in accordance with 37 C.F.R. § 1.121. A marked up version showing changes is attached.

**[0043]** As with seed layers described with reference to FIGURES 1-3, seed layer 440 includes elements implanted in a ULEII process. Examples of elements that can be implanted include Zn, Sn, Cr, Ca, Ag, or In. Such implanted elements can be reactive with barrier layer 430, thereby reducing resistance and improving electromigration effects. A ULEII process has the advantage of avoiding the manufacture of copper alloy targets, such as those necessary in a plasma vapor deposition (PVD) tooled process.